

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT <i>ENGINEERING and COMPLIANCE</i> APPLICATION PROCESSING AND CALCULATIONS	PAGES 5	PAGE 1
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	PROCESSED BY T. Iwata	CHECKED BY

Royal Paper Box
1105 S. Maple Ave.
Montebello, CA 90640
ID#: 23487

EQUIPMENT DESCRIPTION:

Equipment	ID No.	Connected To	Source Type/ Monitoring Unit	Emissions	Conditions
Process 1: PRINTING & DRYING					
System 9:					
PRINTING PRESS, LITHOGRAPHIC, HEIDELBERG, CD741, 4 COLOR, SHEET FED, WITH COATER UNIT A/N: 513306	D21			VOC: (9) [RULE 1130, 1171]	B59.1 B59.3 H23.1 K67.2
OVEN, I.R. CURING, 90 KW A/N: 513306	D22			PM (9)[RULE 404]	
<u>OVEN, U.V. CURING, AIR MOTION SYSTEMS, SIX UV LAMPS, 71 KW</u> A/N: 513306	D27			PM (9)[RULE 404]	

A/N 513304: Title V permit revision application

CONDITIONS:

B59.1: The operator shall not use the following material(s) in this device:

Fountain solutions greater than 5 percent VOC by volume.

B59.3: The operator shall not use the following material(s) in this device:

Blanket wash and roller wash materials with composite vapor pressure exceeding 10 mm Hg at 20 degrees C.

H23.1: This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant
VOC

Rule
District Rule

Rule/Subpart
109

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K67.2: The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Usage of inks, varnishes, fountain solution (including water), roller wash, blanket wash and any other materials containing volatile organic compounds (VOC), in gallons per day of each material.

Density of inks, in pounds per gallon and percentage by weight of lithographic oils in inks.

Ink absorption factor as specified by current SCAQMD guidelines.

VOC content of fountain solution, wash materials and any other materials, in pounds per gallon as applied including water.

These records shall be kept in a manner approved in writing by the Executive Officer.

BACKGROUND:

Royal Paper Box submitted application no. 513306 to permit a new electric UV oven that will be used in conjunction with a permitted lithographic printing press (D21). The new oven will be used in addition to an existing IR oven (D22) that presently serves the press. Having both types of ovens will allow Royal Paper Box to use a wider variety of inks and coatings, offering greater printing flexibility. Royal Paper Box operates several lithographic printing presses, IR and UV ovens under a facility-wide VOC emission cap of 429 lb/month.

Royal Paper Box is a Title V facility. A Title V renewal permit was issued to this facility on October 6, 2009. Royal Paper Box has proposed to revise their Title V renewal permit (with application no. 513304) by adding a UV oven. This permit revision is considered as a “de minimis significant permit revision” to the Title V renewal permit, as described in the Regulation XXX evaluation.

PROCESS DESCRIPTION:

Royal Paper Box is a commercial lithographic printing facility that produces printed, folded paper boxes and packaging. The new UV oven will be added to an existing lithographic printing press and IR oven combination. The UV coating is zero VOC and does not contain any Rule 1401 toxic air contaminants. Royal Paper Box will continue to use low-VOC inks, fountain solutions and aqueous coatings. Printing operations are normally performed during two 8-hour shifts, five days a week.

EMISSIONS CALCULATIONS:

VOC is emitted from the materials used in the press. There are no emissions from the IR oven since it is electric. There will not be an increase in emissions with the addition of the UV oven.

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All the equipment at the facility are operated under a facility-wide VOC limit of 429 pounds per day.

Hourly VOC emissions associated with this printing press = 7.53 lb/hr

RISK ASSESSMENT

There will not be an increase in Rule 1401 toxic air contaminant emission with the use of UV materials and the UV curing oven.

RULE ANALYSIS:

RULE 212 (c)(1): This section requires a public notice for all new or modified permit units that emit air contaminants located within 1,000 feet from the outer boundary of a school. The facility is not located within 1,000 feet of the outer boundary of a school. The closest school located to the facility is 0.3 miles away (Vail High School, 1230 S. Vail Ave., Montebello).

RULE 212 (c)(2): This section requires a public notice for all new or modified facilities that have on-site emission increases exceeding any of the daily maximums as specified by Rule 212(g). There will not be an emission increase with the proposed project.

RULE 212(c)(3): This section requires a public notice for all new or modified permit units with increases in emissions of toxic air contaminants listed in Table I of Rule 1401 resulting in a cancer risk equal or greater than one in a million. There will not be an increase in toxic emissions with the proposed project and there will not be a cancer risk equal or greater than one in a million.

RULE 212(g): This section requires a public notice for all new or modified sources that result in emission increases exceeding any of the daily maximums as specified by Rule 212(g). There will not be an emission increase with the proposed project.

	Maximum Daily Emissions					
	ROG	NO _x	PM ₁₀	SO ₂	CO	Pb
Emission increase	0	0	0	0	0	0
MAX Limit (lb/day)	30	40	30	60	220	3
Compliance Status	Yes	Yes	Yes	Yes	Yes	Yes

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RULES 401 & 402: AQMD database has no records of visible emissions or nuisance complaints against this facility. Compliance with these requirements is expected with the proper operation of the equipment.

RULES 1130 & 1171: Royal Paper Box will continue to use compliant materials and applications pursuant to the requirements and limits of these rules.

REG. XIII

1303(a): Not applicable, there is not an emission increase.

1303(b)(1): Not applicable, modeling is not required for ROG emissions.

1303(b)(2): Emission offsets are not required since there is not an emission increase.

1303(b)(4): The facility is expected to be in full compliance with all applicable rules and regulations of the District.

RULE 1401: There will not be an increase in toxic air contaminants. Compliance is expected.

REGULATION XXX:

The proposed project is considered as a “de minimis significant permit revision” to the Title V permit issued to this facility. Rule 3000(b)(6) defines a “de minimis significant permit revision” as any Title V permit revision where the cumulative emission increases of non-RECLAIM pollutants or hazardous air pollutants (HAP) from these permit revisions during the term of the permit are not greater than any of the following emission threshold levels:

Air Contaminant	Daily Maximum (lb/day)
HAP	30
VOC	30
NO _x	40
PM ₁₀	30
SO _x	60
CO	220

Rule 3003(j) specifies that a proposed permit for a Title V permit revision shall be submitted to EPA for review. To determine if a project qualifies for a “de minimis significant permit revision”, emission increases resulting from all permit revisions that are made after the issuance of the Title V renewal permit shall be accumulated and compared to the above threshold levels. This proposed project is the 1st permit revision to the Title V renewal permit issued to this

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facility on October 6, 2009. The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V renewal permit was issued:

Revision	HAP	VOC	NO _x	PM ₁₀	SO _x	CO
1 st Permit Revision, add Device no. D27 (UV curing oven)	0	0	0	0	0	0
Cumulative Emission Total	0	0	0	0	0	0
Maximum Daily	30	30	40	30	60	220

Since the cumulative emission increases resulting from all permit revisions are not greater than any of the emission threshold levels, this proposed project is considered as a “de minimis significant permit revision” for non-RECLAIM pollutants or HAPs.

RECOMMENDATION:

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a “de minimis significant permit revision”, it is exempt from the public participation requirements under Rule 3006 (b). A proposed permit incorporating this permit revision will be submitted to the EPA for a 45-day review pursuant to Rule 3003(j). If the EPA does not raise any objections within the review period, a revised Title V permit will be issued to this facility.